



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,252	01/18/2001	Daniel A. Gilmour	513AM	8168

7590 10/02/2002

REISING, ETHINGTON, BARNES, KISSELLE,
LEARMAN & McCULLOCH, P.C.
P.O. Box 4390
TROY, MI 48099-4390

EXAMINER

LEE, JINHEE J

ART UNIT	PAPER NUMBER
----------	--------------

2831

DATE MAILED: 10/02/2002

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/765,252

Applicant(s)

GILMOUR, DANIEL A.

Examiner

Jinhee J Lee

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 19 August 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: *allowable subject matter*.

DETAILED ACTION

Claim Objections

1. Claim 26 is objected to because of the following informalities:

On line 3, the phrase "each collar" has grammatical error. Examiner suggests "each of the collars" instead to correct the grammatical error.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 21-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 recites the limitation "the opening(s)" in lines 4-5 and also in line 6.

This is confusing. Examiner suggests "at least one opening" to clarify. This limitation is also cited in claim 22 lines 1-2.

Claim 21 recites the limitation "the pin" in line 9. There is insufficient antecedent basis for this limitation in the claim.

Claim 21 recites the limitation "the glass seal(s)" in line 12 (two times). This is confusing. Examiner suggests "the glass seal" to correct. This limitation is also cited in claim 22 line 2.

Claim 26 recites the limitation "each collar" in line 3. This is confusing. Examiner suggests "each of the collars" to clarify.

Claim 26 recites the limitation "the glass seals" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 26 recites the limitation "the collar" in line 5. This is confusing. Examiner suggests "the collars" to clarify.

Claim 31 recites the limitation "the walls" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 21-22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pryce et al. (5669763) in view of Blumenthal et al. (5683108).

Re claim 21, Pryce et al. substantially discloses a sealed electrical fitting for an automotive fuel tank comprising: a metal wall of the fuel tank having an opening with a circumferentially continuous edge; a least two pins (38) extending through the at least one opening with a longitudinal length greater than the diameter. (see figures 1-2 and column 2 line 66-column 3 line 2 according to the numbering in the middle). Pryce et al. does not explicitly disclose the glass seal bonded to the pins and spacing of pins being equal to or greater than the diameter of the pin, and minimum spacing between a peripheral edge of the glass seal and each immediately adjacent pin being at least equal to the diameter of the pin, the coefficient of thermal expansion of the metal wall

Art Unit: 2831

being greater than the coefficient of thermal expansion of the glass of the glass seal and the metal wall and the glass seal being configured so that the glass is in a compressed state. However, Blumenthal et al. teaches of a sealed electrical fitting with glass seal (164, 166) bonded to the pins and seal configured so that the glass is in a compressed state (see figures 4 and 6). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the glass seal bonded to the pins of Blumenthal et al. on seal of Pryce et al. in order to provide fluid tight sealing engagement. Also, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use spacing of pins being equal to or greater than the diameter of the pin, and minimum spacing between a peripheral edge of the glass seal and each immediately adjacent pin being at least equal to the diameter of the pin, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. And it would have been obvious to one having ordinary skill in the art at the time the invention was made to state that the thermal expansion rate of the flange portion and the tubular housing (made of metal) is greater than the thermal expansion rate of the plurality of glass seals, since it was known in the art that metal and metal alloys have greater thermal expansion rate than glass.

Re claim 22, note that the assembly of Blumenthal et al. includes a fitting further comprising an axial length at least equal to the diameter of the pin and the glass seal with an axial length at least equal to the diameter of the pin (see figures 2 and 4).

Re claim 25, the seal structure of Pryce et al./Blumenthal et al. discloses the claimed invention except that axial length of the glass seal is substantially equal to the

Art Unit: 2831

diameter of the pin. It would have been an obvious matter of design choice to use the glass seal is substantially equal to the diameter of the pin, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Allowable Subject Matter

6. Claims 23, 24, 26-31, would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

The primary reason for the indication of the allowability of claim 23 is the inclusion therein, in combination as currently claimed, of the limitation of the same glass seal bonded to at least two of the pins and the edge of the same opening through the metal wall. This limitation is found in claim 24 and is neither disclosed nor taught by the prior art of record, alone or in combination.

The primary reason for the indication of the allowability of claim 24 is the inclusion therein, in combination as currently claimed, of the limitation of all of the pins are received in the housing and the glass seal is bonded to all of the pins and the housing. This limitation is found in claim 24 and is neither disclosed nor taught by the prior art of record, alone or in combination.

The primary reason for the allowability of claims 26-31 is the inclusion therein, in combination of the limitation of at least two metal collars carried by the flange and each defining one of the through openings having an inner circumferentially continuous edge, each of the collars has one of the pins extending therethrough and one of the glass seal is bonded to each of the pins and the inner edge of the collars in which the pin is received. This limitation is found in claims 26-31 and is neither disclosed nor taught by the prior art of record, alone or in combination.

Response to Arguments

8. Applicant's arguments filed 8/19/02 have been fully considered but they are not persuasive.

In response to applicant's argument that the prior arts do not disclose or teach the specific construction, arrangement and spacing of the pins relative to each other. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). Also, it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re*

Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Pryce et al. and Blumenthal et al. are used in the automotive field.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jinhee J Lee whose telephone number is 703-306-0154. The examiner can normally be reached on M, T, Th and F at 6:30am – 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 703-308-3682. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3431 for regular communications and 703-305-1341 for After Final communications.

Art Unit: 2831

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

jjl
October 1, 2002

 10/1/02
DEAN A. REICHARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800